

### **REMARKS/ARGUMENTS**

Reconsideration of this application is respectfully requested. Please amend claims 1, 3, 17, 23, 24, 26, and 27 and please cancel claims 2, 21, 22, and 25. Of those claims amended herein, claims 1, 17, 23, 24, 26, and 27 are the 6 independent claims in this application. The other unamended claims remaining in this case are original claims. With this amendment, claims 1, 3-20, 23-24, and 26-27 remain in the case. No additional claim fees are due as no new additional claims have been added.

#### **Claim rejections:**

On page 2 of the instant office action, the Examiner has rejected claims 1-27 under 35 USC § 1-2(b) as anticipated by Mraz US 20010015573 ("Mraz"). Applicants' undersigned attorney respectfully submits that with the amendments herein, claims 1, 3-20, 23-24, and 26-27 are allowable over Mraz.

With reference to Applicants' specification at page 22, line 3, to page 23, line 2, with underlining by Applicants' Attorney, it states:

During operation, the guidance control apparatus 100 functions to adjust the connection angle between the miner M and the conveyor unit U in order to determine and adjust the directional heading of the miner M as it advances through the mineral seam. More specifically, the displaceable guide elements 122 of each actuator 116, 118 are extended with the crown 124 of each guide element engaging a cooperating bearing surface 156 on the bumper 152 of the conveyor unit U. When the displaceable guide elements are extended one half the length of their stroke (e.g. three-quarter inch extension for a cylinder with a total stroke of 1.5 inches), the miner M is positively held by the actuators 116, 118 so as to be aligned parallel with the conveyor unit U.

The connection angle between the miner M and the conveyor unit U may be altered by extending the displaceable guide element 122 of one of the actuators 116 or 118 and retracting the displaceable guide element of the other actuator the same amount. Thus, for example, in order to turn right or toward the top of drawing Figure 5a, the displaceable guide element 122 of the second actuator 118 is extended up to three-quarters of one inch (i.e., the full stroke of the cylinder) while the displaceable guide element 122 of the actuator 116 is retracted three-quarters of an inch. Each actuator 116, 118 comprises a hydraulic cylinder with a 1.5 inch stroke and a 10-inch bore working at up to 3,500 psi. Thus each actuator 116, 118 generates up to 137 tons of force. The actuators 116, 118 [sic] are capable of smoothly and easily changing the connection angle between the miner M and the conveyor unit U.

The specification notes that having the displaceable guide elements extended to one half their stroke and then extending one actuator and retracting one actuator to control the direction of the miner is the way Applicants' system operates. For example, see pages 6 and 7 of the specification – page 6, lines 15-17 (one embodiment), lines 21-22 (second embodiment), page 7, lines 2-3 (another embodiment), and lines 7-10 (yet another possible alternative embodiment), as well as in the detailed description.

Applicants' Attorney notes that the claims have been amended herein accordingly. Showing the additions to the claims in underlined text and any deleted text in strikethrough, in part, the independent claims have been amended as follows:

Claim 1 - wherein said first actuator includes a first displaceable guide element and said second actuator includes a second displaceable guide element, said first and second displaceable guide elements being extended approximately one half the length of their stroke when said miner is aligned with said conveyor unit;

whereby responsive to said controller said first and second actuators adjust a connection angle between said miner and said conveyor unit either side of parallel to determine a directional heading for said miner by one of said first or said second displaceable guide elements extending and the other of said first or said second displaceable guide elements retracting.

Claim 17 - a steering mechanism including a first displaceable steering element located at a first side of said miner midline and a second displaceable steering element located at a second side of said miner midline, said first and said second steering mechanisms being carried by one of said miner and said conveyor unit and said displaceable steering element engaging the other of said miner and said conveyor unit whereby said connection angle between said miner and said conveyor unit is adjusted to determine a directional heading for movement of said miner by one of said first or said second displaceable steering elements extending and the other of said first or said second displaceable steering elements retracting.

Claim 23 - positioning a guide mechanism between said miner and said at least one conveyor unit, said guide mechanism including a first displaceable steering element located at a first side of a midline of said miner and a second displaceable steering element located at a

second side of said miner midline;

exerting a force between said miner and said at least one conveyor unit by one of said first or said second displaceable steering elements extending and the other of said first or said second displaceable steering elements retracting where ~~whereby~~ a connection angle between said miner and said conveyor unit is changed, determining a directional heading of said miner; and

Claim 24 - adjusting a steering mechanism, said steering mechanism including a first displaceable steering element located at a first side of a midline of said miner and a second displaceable steering element located at a second side of said miner midline, engaged between said miner and said conveyor unit by one of said first or said second displaceable steering elements extending and the other of said first or said second displaceable steering elements retracting to bring said miner to said desired directional heading; and

Claim 26 - ~~ana~~ a first actuator secured to said mining apparatus at a first side of a midline of said miner and a second actuator secured to said mining apparatus at a second side of said miner midline, said first and said second actuators each including a displaceable steering element having an end engaging a bearing surface on one of said miner and said conveyor unit; ~~whereby said actuator~~ where said first and second actuators adjust ~~adjust~~ a connection angle between said miner and said conveyor unit to determine a directional heading for said miner by one of said first or said second actuator displaceable steering elements extending and the other of said first or said second actuator displaceable steering elements retracting.

Claim 27 - positioning a first guide actuator on the mining apparatus at a first side of a midline of said miner and a second guide actuator on the mining apparatus at a second side of said miner midline; and

determining a directional heading of the miner by controlling a connection angle between the miner and the conveyor unit by exerting a steering force between the miner and the conveyor unit by one of said first or said second guide actuators extending and the other of said first or said second guide actuators retracting.

Clearly, Mraz does not teach or suggest Applicants' claimed invention. Mraz does teach advancing and steering the mining machine using a pair of extenders 12 [e.g. paras 16 and 51].

However, the advancing and steering is all accomplished solely by extension of both extenders or advancing cylinders 12 and not by advancing one and retracting the other. For example, see Figures 4 and 4A where, in Figure 4, both extenders 12 are retracted and, in Figure 4A, where both extenders 12 are extended to advance the mining machine ahead of the conveying assembly. In para 51, lines the only method of steering the mining machine using extenders 12 is taught. On lines 12-15 of para 51, it states: "Advancing cylinders 12 can steer the mining machine 1 by extending in different amounts or at different rates on either side of the mining machine 1." As explained above, Applicants steering is accomplished in a different way that is not anticipated by, taught by, or suggested by Mraz. As such, it is respectfully requested that the Examiner withdraw the instant § 102 rejection based on Mraz and allow the pending claims.

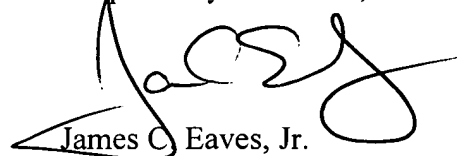
Extension of Time to Respond

The office action to which this amendment pertains was mailed on June 24, 2010 with 3 months to respond without fee. This response is being filed within 4 months of that mailing date, on Monday, October 25<sup>th</sup>. As such, a one month extension is needed and Applicants' Attorney includes herein that request for a one month extension along with authorization to charge the fee for that one month extension to Attorney's PTO Deposit Account.

Conclusion

Applicant's Attorney respectfully submits that, with entry of this amendment, claims 1, 3-20, 23-24, and 26-27 are allowable. As such, it is respectfully requested that the Examiner issue a notice of allowance. However, please call Applicant's undersigned Attorney at (502) 587-3724 should Examiner have any questions or unresolved issues with this application.

Respectfully submitted,



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